

CLAIMS

1. A method for the collective production of microlenses at the end of a set of parallel optical fibres, characterised in that it comprises a step of
5 heating the end of all the fibres (F) in the set by means of an electric arc (A), the plane or planes in which the fibres are situated being for this purpose parallel to the line (X) of the hottest points of the electric arc and the edge or edges of this or these
10 planes on which the ends of the fibres are situated being distant from this in order to round all the fibre ends homogeneously and simultaneously to obtain all the microlenses.

2. A method for the collective production of
15 microlenses according to Claim 1, characterised in that the distance (d) between the ends of the optical fibres and the line of the hottest points is between 850 micrometres and 950 micrometres.

3. A method for the collective production of
20 microlenses according to Claim 1 or 2, characterised in that the set of optical fibres consists of a ribbon (10).

4. A method for the collective production of microlenses according to Claim 3, characterised in that
25 the ribbon comprises monomode fibres (MO) whose terminations comprise a length of silica (SI) welded to a length of fibre with an index gradient (GRAD), the microlenses (L1, Ln) being produced at the end of the lengths of fibres with an index gradient (GRAD).